Ohio Mathematics - Extended Learning Standards

Grade 2

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

1 Use addition and subtraction within 100 to solve one- and two- step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. See Table 1, page 95. 2.OA.1

- a Solve one and two step addition s and subtraction word problems within 50, involving situations where one is “adding to,” “taking from,” “putting together” and “taking apart,” using models or objects. 2.OA.1.A
- b Solve addition and subtraction word problems within 20, involving situations where one is “adding to,” “taking from,” “putting together” and “taking apart,” using models or objects. 2.OA.1.B
- c Solve addition and subtraction word problems within 10 involving situations where one is “adding to,” “taking from,” “putting together” and “taking apart,” using models or objects. 2.OA.1.C
- d Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group 2.OA.1.D
- e Understand that (+) symbol is addition (-) symbol is subtraction and (=) symbol is equal. 2.OA.1.E
- f Engage with putting together and taking apart using models or objects. 2.OA.1.F
- g Engage in 1:1 correspondence. 2.OA.1.G
- h Engage in grouping like objects together. 2.OA.1.H

Add and subtract within 20.

2 FluentlyG add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. See standard 1.OA.6 for a list of mental strategies. 2.OA.2

- a Understand associative and commutative properties 2.OA.2.A
- b Understand that (+) symbol is addition (-) symbol is subtraction and (=) symbol is equal 2.OA.2.B
- c Write the numbers 0-10. 2.OA.2.C
- d Identify numbers 0-20. 2.OA.2.D
- e Match numbers 0-20. 2.OA.2.E
- f Engage with putting together and taking apart using models or objects 2.OA.2.F
- g Engage in 1:1 correspondence 2.OA.2.G
- h Interact in grouping like objects together. 2.OA.2.H
- i Orally count, sign or count using assistive technology, with 1 second automaticity from 1-20. 2.OA.2.I
- j Participate in fluency activities. (using assistive technology switches or voice output devices as needed) 2.OA.2.J
- k Engage in fluency activities, songs, rhymes, tools. (numbers 1-20) 2.OA.2.K

Work with equal groups of objects to gain foundations for multiplication.

3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. 2.OA.3

- a Identify the number of objects in a group (of up to 20) as odd or even. 2.OA.3.A
- b Identify the number of objects in a group (of up to 10) as odd or even. 2.OA.3.B
- c Represent a problem with groups of objects 4 x 2 e.g. 4 groups of 2 pencils. 2.OA.3.C
- d Represent a number with group of objects e.g. 2 = 2 pencils. 2.OA.3.D
- e Participate in grouping objects together by 2s. 2.OA.3.E
- f Understand that (x) symbol is multiplication (-) and (=) symbol is equal. 2.OA.3.F
- g Engage with putting together and taking apart using models or objects. 2.OA.3.G
- h Engage in 1:1 correspondence. 2.OA.3.H
- i Engage in grouping like objects together. 2.OA.3.I
- j Engage with like objects. 2.OA.3.J

4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. 2.OA.4

- a Add the number of objects in an array with up to 5 rows and 4 columns, and represent in an equation. 2.OA.4.A
- b Add the number of objects in an array with up to 3 rows and 3 columns. 2.OA.4.B
- c Recognize a rectangular array. 2.OA.4.C
- d Write numbers to objects counted. 2.OA.4.D
- e Recognize that the term sum is related to an addition problem. 2.OA.4.E
- f Match objects counted with the corresponding number. 2.OA.4.F
- g Count objects. 2.OA.4.G
- h Arrange objects into like groups to show repeated addition. 2.OA.4.H
- i Understand that (+) symbol is addition and (=) symbol is equal. 2.OA.4.I
- j Engage with putting together models or objects. 2.OA.4.J
- k Engage in 1:1 correspondence 2.OA.4.K
- l Sort objects into like groups. 2.OA.4.L
- m Interact with with a group of like objects. 2.OA.4.M

Number and Operations Base Ten

Understand place value.

1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens - called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). 2.NBT.1

- a Identify the correct, expanded form given a model or object representation of a two-digit number. 2.NBT.1.A
- b Understand the position of the digit changes the place value 2.NBT.1.B
- c Write numbers. 2.NBT.1.C
- d Identify numbers 2.NBT.1.D
- e Recognize 10 bundles of ones equals one hundred. 2.NBT.1.E
- f Sort like objects into bundles of 10 ones. 2.NBT.1.F
- g Sort like objects. 2.NBT.1.G
- h Understand a two digit number represents tens and ones. 2.NBT.1.H
- i Understand a one digit number represent ones. 2.NBT.1.I
- j Interact with a bundle of objects. 2.NBT.1.J
- k Engage with a objects. 2.NBT.1.K

2 Count forward and backward within 1,000 by ones, tens, and hundreds starting at any number; skipcount by 5s starting at any multiple of 5. 2.NBT.2

- a Count to 100 by 1’s, 5’s, 10’s 2.NBT.2.A
- b Count backward sequentially. 2.NBT.2B
- c Count forward sequentially. 2.NBT.2C
- d Represent a number of objects with a written numeral. 2.NBT.2D
- e Match a number of objects with a written numbers. 2.NBT.2E
- f Engage with real world counting of objects. 2.NBT.2.F
- g Orally count, sign or count using assistive technology, with 1 second automaticity. 2.NBT.2.G
- h Participate in fluency activities. (using assistive technology switches or voice output devices as needed) 2.NBT.2.H
- i Engage in fluency activities, songs, rhymes, tools. 2.NBT.2.I

3 Read and write numbers to 1,000 using base-ten numerals, number names, expanded formG, and equivalent representations, e.g., 716 is 700 + 10 + 6, or 6 + 700 + 10, or 6 ones and 71 tens, etc. 2.NBT.3

- a Represent a number with 1’s, 10’s and 100’s with objects or bundles of objects. 2.NBT.3.A
- b Demonstrate by matching, drawing, or labeling what each digit in a number represents. 2.NBT.3.B

c Understand that expanded form is splitting numbers in to parts. 2.NBT.3.C

d Count to 100 by 1's, 5's, 10's 2.NBT.3.D

e Count backward sequentially. 2.NBT.3.E

f Count forward sequentially. 2.NBT.3.F

g Partition objects for counting. 2.NBT.3.G

h Represent a number of objects with a written numeral 2.NBT.3.H

i Match a number of objects with a written numbers 2.NBT.3.I

j Understand that (+) symbol is addition 2.NBT.3.J

k Interact with a group of objects to be counted 2.NBT.3.K

l Orally count, sign or count using assistive technology, with 1 second automaticity. 2.NBT.3.L

m Participate in fluency activities. (using assistive technology switches or voice output devices as needed) 2.NBT.3.M

n Engage in fluency activities, songs, rhymes, tools. 2.NBT.3.N

4 Compare two threedigit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. 2.NBT.4

a Compare two-digit numbers based on values of the digits in each place, using >, =, and < symbols (e.g., 56 >52; 45<56). 2.NBT.4.A

b Compare one-digit numbers, as shown in the picture below, based on values using >, =, and < symbols (e.g., 6 >2; 5<6). 2.NBT.4.B

c The greater the number of digits the greater the number. 2.NBT.4.C

d Identify how many numbers are in the numbers to compare. 2.NBT.4.D

e Identify whether a set of objects is "greater than," "less than" or "same as or equal to" another set of objects. 2.NBT.4.E

f Understand place value as ones, tens, and hundreds. 2.NBT.4.F

g Match sets of numbers to their respective number. 2.NBT.4.G

h Match objects to a number. 2.NBT.4.H

i Count objects. 2.NBT.4.I

j Sort groups of objects. 2.NBT.4.J

k Engage in math activities or games that practice the vocabulary "greater than," "less than" or "same as or equal to" 2.NBT.4.K

l Engage with sets of objects to compare. 2.NBT.4.L

m Engage with objects that can be counted. 2.NBT.4.M

Use place value understanding and properties of operations to add and subtract.

5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.5

- a Add and subtract up to the sum of 50 using strategies based on place value (e.g., collecting the tens, collecting the ones, and composing ten ones to make a ten). 2.NBT.5.A
- b Add and subtract up to the sum of 20 using strategies based on place value. 2.NBT.5.B
- c Add and subtract up to the sum of 10 using models and concrete objects. 2.NBT.5.C
- d Count backward 2.NBT.5.D
- e Count forward 2.NBT.5.E
- f Understand associative and commutative properties 2.NBT.5.F
- g Understand that (+) symbol is addition (-) symbol is subtraction and (=) symbol is equal 2.NBT.5.G
- h Recognize that addition and subtraction of whole numbers are based on sequential counting. 2.NBT.5.H
- i Understand place value as ones, tens, and hundreds. 2.NBT.5.I
- j Understand that 10 bundles of ones equal 100. 2.NBT.5.J
- k Understand that 10 ones equal 1 ten in a bundle. 2.NBT.5.K
- l Write the numbers 0-100. 2.NBT.5.L
- m Identify numbers 0-100. 2.NBT.5.M
- n Match numbers 0-100. 2.NBT.5.N
- o Engage with putting together and taking apart using models or objects. 2.NBT.5.O
- p Engage in 1:1 correspondence. 2.NBT.5.P
- q Match a number to the objects. 2.NBT.5.Q
- r Interact in grouping like objects together. 2.NBT.5.R
- s Count objects and groups of objects. 2.NBT.5.S
- t Interact with a group of objects to be counted. 2.NBT.5.T
- u Orally count, sign or count using assistive technology, with 1 second automaticity. 2.NBT.5.U
- v Participate in fluency activities. (using assistive technology switches or voice output devices as needed). 2.NBT.5.V
- w Engage in fluency activities, songs, rhymes, tools. 2.NBT.5.W

6 Add up to four twodigit numbers using strategies based on place value and properties of operations. 2.NBT.6

a Add 2 two-digit numbers using at least one strategy (e.g., concrete models or drawings, decomposing numbers, or strategies based on place value, properties of operations, and/ or relationships between addition and subtraction). 2.NBT.6.A

b Add and subtract 2 two-digit numbers (multiples of 10) using at least one strategy (e.g., concrete models or drawings decomposing numbers, or strategies based on place value, properties of operations, and/ or relationships between addition and subtraction). 2.NBT.6.B

c Add and subtract 1 two-digit number and 1 one- digit number, using models and concrete objects. 2.NBT.6.C

d Add tens on their own. 2.NBT.6.D

e Add ones on their own. 2.NBT.6.E

f Understand that two digits is tens. 2.NBT.6.F

g Understand that one digit is ones. 2.NBT.6.G

h Understand that (+) symbol is addition and (=) symbol is equal 2.NBT.6.H

i Engage with putting together and taking apart using models or objects 2.NBT.6.I

j Engage in 1:1 correspondence. 2.NBT.6.J

k Match a number to the objects. 2.NBT.6.K

l Interact in grouping like objects together. 2.NBT.6.L

m Engage with sets of objects. 2.NBT.6.M

n Engage with numbers. 2.NBT.6.N

Use place value understanding and properties of operations to add and subtract.

7 Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; record the strategy with a written numerical method (drawings and, when appropriate, equations) and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, hundreds are added or subtracted from hundreds, tens are added or subtracted from tens, ones are added or subtracted from ones; and sometimes it is necessary to compose or decompose tens or hundreds. 2.NBT.7

- a Add 3 two-digit numbers using at least one strategy (e.g., concrete models or drawings, decomposing numbers, or strategies based on place value, properties of operations, and/ or relationships between addition and subtraction). 2.NBT.7.A
- b Add 2 two-digit numbers using at least one strategy (e.g., concrete models or drawings, decomposing numbers, or strategies based on place value, properties of operations, and/ or relationships between addition and subtraction). 2.NBT.7.B
- c Add and subtract 2 two-digit numbers (multiples of 10) using at least one strategy (e.g., concrete models or drawings decomposing numbers, or strategies based on place value, properties of operations, and/ or relationships between addition and subtraction). 2.NBT.7.C
- d Add and subtract 1 two-digit number and 1 one- digit number, using models and concrete objects. 2.NBT.7.D
- e Add 100's on their own 2.NBT.7.E
- f Add 10's on their own. 2.NBT.7.F
- g Add 1's on their own. 2.NBT.7.G
- h Demonstrate taking apart is subtraction and demonstrate putting together is adding 2.NBT.7.H
- i Understand that three digits is 100's. 2.NBT.7.I
- j Understand that two digits is 10's. 2.NBT.7.J
- k Understand that one digit is 1's. 2.NBT.7.K
- l Understand that (+) symbol is addition (-) symbol is subtraction and (=) symbol is equal. 2.NBT.7.L
- m Count numbers 0-100 forward and backward. 2.NBT.7.M
- n Match subtract (-) to terms such as: take away, take apart, minus, subtract 2.NBT.7.N
- o Match add (+) to terms such as: count on, plus, put together, group. 2.NBT.7.O
- p Describe or demonstrate - as taking away using multi-sensory models. 2.NBT.7.P
- q Describe or demonstrate + as putting together using multi-sensory models. 2.NBT.7.Q

r Follow along and mimic “putting together” and “taking apart” as demonstrated using multi-sensory models to represent addition and subtraction. 2.NBT.7.R

s Engage in demonstrations using multi-sensory models to represent addition and subtraction equations. 2.NBT.7.S

t Engage in 1:1 correspondence. 2.NBT.7.T

u Match a number to the objects. 2.NBT.7.U

v Interact in grouping like objects together. 2.NBT.7.V

w Engage with base 10 blocks. 2.NBT.7.W

x Engage with concrete models and drawings. 2.NBT.7.X

8 Mentally add 10 or 100 to a given number 100- 900, and mentally subtract 10 or 100 from a given number 100-900. 2.NBT.8

a Add or subtract 100 to or from a given number. 2.NBT.8.A

b Add or subtract 10 to or from a given number up to 100. 2.NBT.8.B

c Add 100 to a given number with visual or physical representations. 2.NBT.8.C

d Add 10 to a given number with visual or physical representations. 2.NBT.8.D

e Partition and combine tens and ones 2.NBT.8.E

f Partition small numbers 2.NBT.8.F

g Count forward and backward by 100’s to 1000. 2.NBT.8.G

h Count forward and backward by 10’s to 100. 2.NBT.8.H

i Identify the 10’s column on a 100 chart. 2.NBT.8.I

j Identify the number 100. 2.NBT.8.J

k Identify the number 10. 2.NBT.8.K

l Engage with the numbers 10 or 100. 2.NBT.8.L

m Orally count, sign or count using assistive technology, with 1 second automaticity. 2.NBT.8.M

n Participate in fluency activities. (using assistive technology switches or voice output devices as needed). 2.NBT.8.N

o Engage in fluency activities, songs, rhymes, tools. 2.NBT.8.O

9 Explain why addition and subtraction strategies work, using place value and the properties of operations. Explanations may be supported by drawings or objects. 2.NBT.9

a Identify or create a model that can be used to solve either an addition or a subtraction problem. 2.NBT.9.A

b Identify or create a model that can be used to solve an addition problem. 2.NBT.9.B

c Identify which model represents an addition problem, given a choice of two models. 2.NBT.9.C

d Two digit equals 10’s 2.NBT.9.D

e Understand 1 digit equals 1's 2.NBT.9.E

f Understand there are relationships among number 2.NBT.9.F

g Count whole numbers sequentially 2.NBT.9.G

h Write numbers 2.NBT.9.H

i Match numbers to objects 2.NBT.9.I

j Represent numbers with objects 2.NBT.9.J

k Engage with numbers 2.NBT.9.K

Measurement and Data

Measure and estimate lengths in standard units.

1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2.MD.1
   - a. Identify numbers on a measuring tool. 2.MD.1.A
   - b. Demonstrate lining up an object at 0. 2.MD.1.B
   - c. Recognize the placement of the measuring tool when measuring the length starts at 0. 2.MD.1.C
   - d. Identify 0 on a measuring tool as the starting point of an object to be measured. 2.MD.1.D
   - e. Measure an object with a given tool such as a ruler, yardstick, meter stick or measuring tape. 2.MD.1.E
   - f. Demonstrate lining up an object at 0. 2.MD.1.F
   - g. Recognize the placement of the measuring tool when measuring the length starts at 0. 2.MD.1.G
   - h. Identify 0 on a measuring tool as the starting point of an object to be measured. 2.MD.1.H
   - i. Understand that length is the size of an object. 2.MD.1.I
   - j. Match an object to measured with the closest in size measuring tool. 2.MD.1.J
   - k. Match the name of the measuring tool to the tool. 2.MD.1.K
   - l. Interact with various sized objects that can be measured. 2.MD.1.L
   - m. Interact with with a given tool such as a ruler, yardstick, meter stick or measuring tape. 2.MD.1.M
2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. 2.MD.2
   - a. Order objects based on their length. 2.MD.2.A
   - b. Identify numbers on a measuring tool. 2.MD.2.B
   - c. Measure an object with a given tool such as a ruler, yardstick, meter stick or measuring tape. 2.MD.2.C
   - d. Recognize the vocabulary longer, shorter, about the same size. 2.MD.2.D
   - e. Demonstrate lining up an object at 0. 2.MD.2.E
   - f. Recognize the placement of the measuring tool when measuring the length starts at 0. 2.MD.2.F
   - g. Understand that length is the size of an object. 2.MD.2.G
   - h. Match an object to measured with the closest in size measuring tool. 2.MD.2.H
   - i. Match the name of the measuring tool to the tool. 2.MD.2.I
   - j. Interact with various sized objects that can be measured. 2.MD.2.J

k Interact with with a given tool such as a ruler, yardstick, meter stick or measuring tape. 2.MD.2.K

3 Estimate lengths using units of inches, feet, centimeters, and meters. 2.MD.3

a Match the unit of length to the tool. 2.MD.3.A

b Measure an object using non-standards units. (e.g., same length pencils, paperclips). 2.MD.3.B

c Identify which measurement tool to use (e.g., use a ruler to measure length; use a scale to find weight) 2.MD.3.C

d Interact with objects to be measured. 2.MD.3.D

e Interact with measuring tools. 2.MD.3.E

4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard-length unit. 2.MD.4

a Understand to get the difference in length between two objects what operation is used. 2.MD.4.A

b Measure and compare the length of an object with two different standard or nonstandard tools. 2.MD.4.B

c Measure to determine how much longer one object is than another using a non-standard unit. 2.MD.4.C

d Demonstrate lining up an object at 0. 2.MD.4.D

e Identify 0 on a measuring tool as the starting point of an object to be measured. 2.MD.4.E

f Identify numbers on a measuring tool 2.MD.4.F

g Understand the vocabulary longer and shorter 2.MD.4.G

h Order objects by their size 2.MD.4.H

i Interact with a measuring tool 2.MD.4.I

j Interact with objects to be measured 2.MD.4.J

Relate addition and subtraction to length.

5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same whole number units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.) 2.MD.5

- a Solve addition and subtraction word problems involving lengths. 2.MD.5.A
- b Solve addition word problems involving length. 2.MD.5.B
- c Set-up a equation from a given word problem. 2.MD.5.C
- d Measure the length of two objects using non- standard units to determine the total length of the two objects combined. 2.MD.5.D
- e Identify the operation used when interpreting the word problem. 2.MD.5.E
- f Recognize that words can be represented by numbers. 2.MD.5.F
- g Match subtract (-) to terms such as: take away, take apart, minus, subtract 2.MD.5.G
- h Match add (+) to terms such as: count on, plus, put together, group. 2.MD.5.H
- i Describe or demonstrate - as taking away using multi-sensory models. 2.MD.5.I
- j Describe or demonstrate + as putting together using multi-sensory models. 2.MD.5.J
- k Follow along and mimic “putting together” and “taking apart” as demonstrated using multi-sensory models to represent addition and subtraction. 2.MD.5.K
- l Engage in demonstrations using multi-sensory models to represent addition and subtraction equations. 2.MD.5.L
- m Interact with a word problem. 2.MD.5.M
- n Interact with a drawing. 2.MD.5.N

6 Represent whole numbers as lengths from 0 on a number line diagramG with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram. 2.MD.6

- a Add or subtract using a number line 2.MD.6.A
- b Count on a number line 2.MD.6.B
- c Identify 0 on a number line 2.MD.6.C
- d Demonstrate that moving forward is addition and moving backwards is subtraction on a number line. 2.MD.6.D
- e Identify numbers on a number line. 2.MD.6.E
- f Interact with a number line. 2.MD.6.F

Work with time and money.

7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. 2.MD.7

- a Tell time to the nearest 15 minute intervals on digital and analog clocks. 2.MD.7.A
- b Tell time to the nearest hour and half-hour intervals on digital and analog clocks. 2.MD.7.B
- c Tell time to the nearest hour on digital and analog clocks. 2.MD.7.C
- d Identify events that happen in the morning (a.m.) or afternoon/evening (p.m.). 2.MD.7.D
- e Match an event to the time of the day that it might happen in the morning (a.m.) or afternoon/evening (p.m.). 2.MD.7.E
- f Match (a.m.) to the morning and (p.m.) to the night 2.MD.7.F
- g Interact with a clock 2.MD.7.G

8 Solve problems with money. a. Identify nickels and quarters by name and value. b. Find the value of a collection of quarters, dimes, nickels, and pennies. c. Solve word problems by adding and subtracting within 100, dollars with dollars and cents with cents (not using dollars and cents simultaneously) using the $ and ¢ symbols appropriately (not including decimal notation). 2.MD.8

- a Identify coins/bills and match to their values and corresponding symbol ($, ¢). 2.MD.8.A
- b Solve problems involving a combination of coins and dollar bills within a word problem 2.MD.8.B
- c Identify the operation used when interpreting the word problem. 2.MD.8.C
- d Recognize that words can be represented by numbers. 2.MD.8.D
- e Understand that (+) symbol is addition (-) symbol is subtraction and (=) symbol is equal 2.MD.8.E
- f Interact with a word problem. 2.MD.8.F
- g Count by 1's, 5's, 10's. 2.MD.8.G
- h Sort like coins together 2.MD.8.H
- i Match like coins and one-dollar bills. 2.MD.8.I
- j Select the correct coins and/or bills to match a given amount. 2.MD.8.J
- k Identify coins (quarters, dimes, nickels, pennies). 2.MD.8.K
- l Interact with coins and dollars. 2.MD.8.L

Represent and interpret data.

9 Generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object. Show the measurements by creating a line plotG, where the horizontal scale is marked off in whole-number units. 2.MD.9

- a Gather data (e.g., measure the length of an object) and graph the data on a line plot. 2.MD.9.A
- b Graph given measurement data on a line plot. 2.MD.9.B
- c Interact with a line plot. 2.MD.9.C
- d Identify numbers on a number line. 2.MD.9.D
- e Demonstrate lining up an object at 0. 2.MD.9.E
- f Identify 0 on a measuring tool as the starting point of an object to be measured. 2.MD.9.F
- g Identify numbers on a measuring tool. 2.MD.9.G
- h Understand the vocabulary longer and shorter. 2.MD.9.H
- i Order objects by their size. 2.MD.9.I
- j Explore objects with different measurements. 2.MD.9.J
- k Interact with a measuring tool. 2.MD.9.K
- l Interact with objects to be measured tactually or visually. 2.MD.9.L

Represent and interpret data.

10 Organize, represent, and interpret data with up to four categories; complete picture graphs when singleunit scales are provided; complete bar graphs when single-unit scales are provided; solve simple puttogether, take-apart, and compare problems in a graph. See Table 1, page 95. 2.MD.10

- a Create a bar or picture graph, with given data and answer questions about the graph using a single unit scale. 2.MD.10.A
- b Create a picture graph, given data and answer questions about the graph. 2.MD.10.B
- c Classify and count objects in categories of a data set (e.g., given a set of colored cubes: identify if any are red, count how many are red, etc.). 2.MD.10.C
- d Demonstrate putting together and taking apart of objects. 2.MD.10.D
- e Interact with data. 2.MD.10.E
- f Match parts of a graph to their function. 2.MD.10.F
- g Identify parts of a graph. 2.MD.10.G
- h Interact with a graph tactually or visually. 2.MD.10.H

Geometry

Reason with shapes and their attributes.

1. Recognize and identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides or vertices. Recognize and identify cubes, rectangular prisms, cones, and cylinders. 2.G.1
   - a. Classify shapes by their defining attributes (e.g., quadrilaterals, triangles, number of sides and angles) 2.G.1.A
   - b. Identify cubes, rectangular prisms, cones, cylinders and spheres. 2.G.1.B
   - c. Identify cubes, rectangular prisms, cones, cylinders and spheres. 2.G.1.C
   - d. Identify three-dimensional shapes in the environment. 2.G.1.D
   - e. Identify shapes as two-dimensional or three- dimensional (i.e., flat vs. solid). 2.G.1.E
   - f. Name objects from the environment that are 2D and 3D shapes. 2.G.1.F
   - g. Select an object from the environment and match to a description. 2.G.1.G
   - h. Explore and manipulate shapes tactually or visually. 2.G.1.H
2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. 2.G.2
   - a. Partition rectangles into two, three or four equal parts; identify the parts as “halves,” “thirds,” “quarters,” “half of,” “a third of,” or “a quarter of;” and identify the whole as “two halves,” “three thirds,” “four fourths” or “four quarters.” 2.G.2.A
   - b. Recognize the vocab: 2.G.2.B
     1. Equal to: The same value as. 2.G.2.B.1
     2. Fourth: One of four equal parts. 2.G.2.B.2
     3. Fraction: Part of a whole. 2.G.2.B.3
     4. Half Circle: One of two equal parts of a circle. 2.G.2.B.4
     5. Half/Halves: One or more of two equal parts of a whole. 2.G.2.B.5
     6. Quarter Circle: One of four equal parts of a circle. 2.G.2.B.6
     7. Quarter of: One of four equal parts 2.G.2.B.7
   - c. Count the number of sections in a rectangle that has been divided into equal parts (e.g., half, quarter, third). 2.G.2.C
   - d. Demonstrate counting columns from left to right. 2.G.2.D
   - e. Demonstrate understanding of same size. 2.G.2.E
   - f. Match the name of the rectangle with its shape. 2.G.2.F
   - g. Name a rectangle and circle from the environment. 2.G.2.G
   - h. Select a rectangle and circle from the environment to describe. 2.G.2.H
   - i. Interact with real world objects that are rectangles tactually or visually. 2.G.2.I
3. Partition circles and rectangles into two, three, or four equal shares; describe the shares using the words halves, thirds, or fourths and quarters, and use the phrases

half of, third of, or fourth of and quarter of. Describe the whole as two halves, three thirds, or four fourths in realworld contexts. Recognize that equal shares of identical 2.G.3

a Partition rectangles into two, three or four equal parts; identify the parts as “halves,” “thirds,” “quarters,” “half of,” “a third of,” or “a quarter of;” and identify the whole as “two halves,” “three thirds,” “four fourths” or “four quarters.” 2.G.3.A

b Partition circles into two or four equal parts; identify the parts as “halves,” “quarters,” “half of,” “a third of” or “a quarter of;” and identify the whole as “two halves,” “three thirds,” “four fourths” or “four quarters.” 2.G.3.B

c Recognize the vocab: 2.G.3.C

1 Equal to: The same value as. 2.G.3.C.1

2 Fourth: One of four equal parts. 2.G.3.C.2

3 Fraction: Part of a whole. 2.G.3.C.3

4 Half Circle: One of two equal parts of a circle. 2.G.3.C.4

5 Half/Halves: One or more of two equal parts of a whole. 2.G.3.C.5

6 Quarter Circle: One of four equal parts of a circle. 2.G.3.C.6

7 Quarter of: One of four equal parts. 2.G.3.C.7

d Match a model with “halves,” “thirds,” fourths” or “quarters.” 2.G.3.D

e Understand that smaller shapes are made when dividing shapes into parts 2.G.3.E

f Count the number of sections in a circle or rectangle that has been divided into equal parts (e.g., half, quarter, third). 2.G.3.F

g Demonstrate counting columns from left to right. 2.G.3.G